

8-Port multibeam antenna ,8x 3100-4200 MHz , 4x 33° HPBW, 1x RET

- Enhances network capacity and spectrum utilization when used in six sector applications
- Reduces antenna count to minimize Cap-Ex and Op-Ex costs 3 antennas required for 6 sector configurations
- Future proof-covers bands 42,43,48 plus C-Band and future CBRS expansions

General Specifications

Antenna Type Multibeam

Band Single band

Color Light Gray (RAL 7035)

Grounding TypeRF connector inner conductor and body grounded to reflector and mounting

bracket

Performance Note Outdoor usage

Radome MaterialFiberglass, UV resistantRadiator MaterialLow loss circuit board

Reflector Material Aluminum

RF Connector Interface 4.3-10 Female

RF Connector Location Bottom

RF Connector Quantity, high band

Remote Electrical Tilt (RET) Information

RET Hardware CommRET v2

RET Interface AISG1 8-pin DIN Female | AISG1 8-pin DIN Male

RET Interface, quantity 1 female | 1 male

Input Voltage 10-30 Vdc
Internal RET High band (1)

Power Consumption, active state, maximum 10 W Power Consumption, idle state, maximum 2 W

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

 Width
 301 mm | 11.85 in

 Depth
 181 mm | 7.126 in

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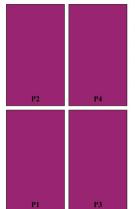
Length

1100 mm | 43.307 in

Net Weight, without mounting kit

12 kg | 26.455 lb

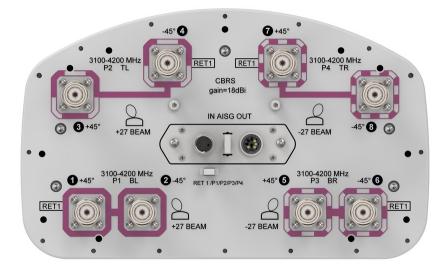
Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
P1	3100-4200	1 - 2	1	AIS CA	CPxxxxxxxxxxxxxxxP1
P2	3100-4200	3 - 4			
P3	3100-4200	5 - 6		AISG1	
P4	3100-4200	7 - 8			

(Sizes of colored boxes are not true depictions of array sizes)

Port Configuration



Electrical Specifications

Impedance 50 ohm

COMMSCOPE®

Operating Frequency Band 3100 – 4200 MHz

Polarization ±45°

Total Input Power, maximum 640 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	3100-3550	3550-3700	3700-4200
Gain, dBi	17.5	17.7	17.8
Beam Centers, Horizontal, degrees	±27	±27	±27
Beamwidth, Horizontal, degrees	38	36	34
Beamwidth, Vertical, degrees	9.9	9.1	8.5
Beam Tilt, degrees	2-12	2-12	2-12
USLS (First Lobe), dB	19	24	20
Front-to-Back Ratio at 180°, dB	32	32	31
Isolation, Cross Polarization, dB	25	25	25
Isolation, Inter-band, dB	25	25	25
VSWR Return loss, dB	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-145	-145	-145
Input Power per Port at 50°C, maximum, watts	80	80	80

Electrical Specifications, BASTA

Frequency Band, MHz	3100-3550	3550-3700	3700-4200
Gain by all Beam Tilts, average, dBi	17.1	17.3	17.1
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.5	±1
Beamwidth, Horizontal Tolerance, degrees	±2.7	±2.5	±3
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.4	±0.6
USLS, beampeak to 20° above beampeak, dB	17	17	14
Front-to-Back Total Power at 180° ± 30°, dB	26	25	25
CPR at Boresight, dB	17	19	23
CPR at 10 dB Horizontal Beamwidth, dB	8	10	10

Mechanical Specifications

Wind Loading @ Velocity, frontal	154.0 N @ 150 km/h (34.6 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	125.0 N @ 150 km/h (28.1 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	297.0 N @ 150 km/h (66.8 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	157.0 N @ 150 km/h (35.3 lbf @ 150 km/h)

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Wind Speed, maximum 241 km/h (150 mph)

Packaging and Weights

 Width, packed
 441 mm | 17.362 in

 Depth, packed
 337 mm | 13.268 in

 Length, packed
 1245 mm | 49.016 in

 Weight, gross
 23 kg | 50.706 lb

Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Below maximum concentration value

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system
REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant



Included Products

BSAMNT-3 – Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

